3. The polynucleotide of claim 1, wherein the polypeptide is selected from the group consisting of insecticidal polypeptides, herbicide tolerance polypeptides, stress tolerance-related polypeptides, and oil profile modification polypeptides.

4. The polynucleotide of claim 3, wherein the polypeptide is an insecticidal polypeptide or herbicide tolerance polypeptide.

5. The polynucleotide of claim 4, wherein the polypeptide is an insecticidal polypeptide.

6. A plant expression construct comprising the polynucleotide of claim 1.

7. A vector comprising the plant expression construct of claim 6.

8. A method for producing a synthetic polynucleotide, the method comprising:

removing codons selected from the group consisting of TTA, CTA, GTA, CGT, AGT, and CGA, from a nucleotide sequence encoding a polypeptide that is native in an organism other than a maize plant, to produce a codon-optimized nucleotide sequence;

engineering the codon-optimized nucleotide sequence such that:

the codon-optimized nucleotide sequence comprises at least one polyadenylation sequence selected from the group consisting of AATAAA, AATAAT, AACCAA, ATATAA, AATCAA, ATACTA, ATAAAA, ATGAAA, AAGCAT, ATTAAT, ATACAT, AAAATA, ATTAAA, AATTAA, AATACA, and CATAAA, present in the same number and in the same location as in the nucleotide sequence encoding the polypeptide that is native in the organism other than a maize plant,

the codon-optimized nucleotide sequence does not comprise any polyadenylation sequence selected from the group consisting of AATAAT, AACCAA, ATATAA, ATACTA, ATAAAA, ATGAAA, AAGCAT, ATTAAT, ATACAT, AAAATA, ATTAAA, AATTAA, AATACA, and CATAAA in a different number or location than in the nucleotide sequence encoding the polypeptide that is native in the organism other than a maize plant, and

the codon-optimized nucleotide sequence does not comprise a polyadenylation sequence selected from the group consisting of ATATAT, TTGTTT, TTTTGT, TGTTTT, TATATA, TATTTT, TTTTTT, ATTTTT, TTATTT, TTTATT, TAATAA, ATTTAT, TATATT, TTTTAT, ATATTT, TATTAT, TGTTTG, TTATAT, TGTAAT, AAATAA, AATTTT, TTTTTA, TAATTT, TTAATT, AAATTT, TTTGTT, ATTATT, ATTTTA, TTTAAT, and TTTTAA; and

constructing the synthetic polynucleotide.

9. The method according to claim 8, wherein constructing the synthetic polynucleotide comprises concatenation of smaller oligonucleotides, or restriction digestion and ligation.

10. The method according to claim 8, further comprising ligating the synthetic polynucleotide into an expression vector comprising a plant promoter that is functional in maize.

11. A method for producing transgenic maize, the method comprising:

transforming a maize cell with the vector of claim 7, thereby producing a transgenic maize cell.

12. The method according to claim 11, further comprising regenerating a transgenic maize plant from the transgenic maize cell.

13. A polynucleotide comprising:

a plant promoter that is functional in soybean; and

a synthetic nucleotide sequence encoding a polypeptide encoded by a native nucleotide sequence in the genome of an organism other than a soybean plant,

wherein the synthetic nucleotide sequence has been codon-optimized to remove codons selected from the group consisting of TTA, CTA, TCG, CCG, ACG, GCG, CGA, and CGG, from the native nucleotide sequence,

wherein the synthetic nucleotide sequence comprises at least one polyadenylation sequence selected from the group consisting of AATAAA, AATAAT, AACCAA, ATATAA, AATCAA, ATACTA, ATAAAA, ATGAAA, AAGCAT, ATTAAT, ATACAT, AAAATA, ATTAAA, AATTAA, AATACA, and CATAAA, present in the same number and in the same location as in the native nucleotide sequence,

wherein the synthetic nucleotide sequence does not comprise any polyadenylation sequence selected from the group consisting of AATAAT, AACCAA, ATATAA, ATACTA, ATAAAA, ATGAAA, AAGCAT, ATTAAT, ATACAT, AAAATA, ATTAAA, AATTAA, AATACA, and CATAAA in a different number or location than in the native nucleotide sequence, and

wherein the synthetic nucleotide sequence does not comprise a polyadenylation sequence selected from the group consisting of ATATAT, TTGTTT, TTTTGT, TGTTTT, TATATA, TATTTT, TTTTTT, ATTTTT, TTATTT, TTTATT, TAATAA, ATTTAT, TATATT, TTTTAT, ATATTT, TATTAT, TGTTTG, TTATAT, TGTAAT, AAATAA, AATTTT, TTTTTA, TAATTT, TTAATT, AAATTT, TTTGTT, ATTATT, ATTTTA, TTTAAT, and TTTTAA.

14. The polynucleotide of claim 13, wherein the nucleotide sequence encoding the polypeptide has been codon-optimized to remove from the reference nucleotide sequence all codons selected from the group consisting of TTA, CTA, TCG, CCG, ACG, GCG, CGA, and CGG.

15. The polynucleotide of claim 13, wherein the polypeptide is selected from the group consisting of insecticidal polypeptides, herbicide tolerance polypeptides, stress tolerance-related polypeptides, and oil profile modification polypeptides.

16. The polynucleotide of claim 15, wherein the polypeptide is an insecticidal polypeptide or herbicide tolerance polypeptide.

17. The polynucleotide of claim 16, wherein the polypeptide is an insecticidal polypeptide.

18. A plant expression construct comprising the polynucleotide of claim 13.

19. A vector comprising the plant expression construct of claim 18.

20. A method for producing a synthetic polynucleotide, the method comprising:

removing codons selected from the group consisting of TTA, CTA, TCG, CCG, ACG, GCG, CGA, and CGG, from a nucleotide sequence encoding a polypeptide that is native in an organism other than a soybean plant, to produce a codon-optimized nucleotide sequence;